

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/697,638	10/31/2003		Tsutomu Matsuzaki	062709-0115	8489	
22428	7590	08/11/2005		EXAMINER		
FOLEY AN SUITE 500	D LARI	ONER	HUSON, MONICA A			
3000 K STRI	EET NW			ART UNIT	PAPER NUMBER	
WASHINGT	ON, DC	20007		1732		
				DATE MAIL ED. 09/11/2004	<del>-</del>	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/697,638	MATSUZAKI ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Monica A. Fontaine	1732			
Period fo	The MAILING DATE of this communication	on appears on the cover sheet w	ith the correspondence address			
THE N - Exten after: - If the - If NO - Failur Any re	ORTENED STATUTORY PERIOD FOR INTERIOR DATE OF THIS COMMUNICAT sions of time may be available under the provisions of 37 (SIX (6) MONTHS from the mailing date of this communicat period for reply specified above is less than thirty (30) days period for reply is specified above, the maximum statutory to to reply within the set or extended period for reply will, be ply received by the Office later than three months after the digital patent term adjustment. See 37 CFR 1.704(b).	TION.  CFR 1.136(a). In no event, however, may a rition.  s, a reply within the statutory minimum of thir period will apply and will expire SIX (6) MON y statute, cause the application to become AE	reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communic  BANDONED (35 U.S.C. § 133).	cation.		
Status		•				
2a)⊠ 3)⊟	Responsive to communication(s) filed on This action is FINAL. 2b) Since this application is in condition for a closed in accordance with the practice up	This action is non-final. Illowance except for formal matt	•	ts is		
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>1-34</u> is/are pending in the applicate 4a) Of the above claim(s) <u>1-15</u> is/are with Claim(s) is/are allowed. Claim(s) <u>16-34</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction	ndrawn from consideration.				
Application	on Papers		•			
10)[2]	The specification is objected to by the Extra free drawing(s) filed on 31 October 2003  Applicant may not request that any objection Replacement drawing sheet(s) including the office oath or declaration is objected to by the specific of the second	is/are: a)⊠ accepted or b)⊡ o to the drawing(s) be held in abeyar correction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.12			
Priority u	nder 35 U.S.C. § 119		•			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment	(s)					
2) Notice 3) Inform Paper	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO-1449 or PTO/5 No(s)/Mail Date	18) Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)			

#### **DETAILED ACTION**

This office action is in response to the Amendment filed 10 May 2005.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-18, 20, 28-29, and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Millif et al. (U.S. Patent 6,214,266). Regarding Claim 16, Millif et al., hereafter "Millif," show that it is known to carry out a method of manufacturing a cross member, which is configured to extend in a width direction of a vehicle body and which is configured to have both ends connected to side framework structures of the vehicle body (Abstract), the method comprising the steps of forming, from a material, a base frame extending in a width direction of the vehicle body by means of resinous molding (Column 3, lines 14-16); and insert molding the base frame, within limited ranges thereof in the width direction of the vehicle body, in resinous material belonging to a same material system as the material of the base frame, thereby forming reinforcing frame parts integral with the base frame (Column 3, lines 31-35), wherein the base frame and the reinforcing frame parts have cross sections (Figure 3; It is noted that the method steps (i.e. molding steps) of the claim are not affected by changing the cross sections of the frame parts. To be entitled to weight in method claims, recited structural limitations must affect

the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. Ex parte Pfeiffer 135 USPQ 31.).

Regarding Claim 17, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the base frame is injection-molded (Column 3, lines 14-16).

Regarding Claim 18, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the reinforcing frame parts are produced by means of insert molding while inserting part of the base frame into a molding die (Column 3, lines 24-46).

Regarding Claim 20, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the base frame and the reinforcing frame parts are made from the same engineering material (Column 3, lines 23-25).

Regarding Claim 28, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 18 above, including a method wherein the reinforcing frame parts are produced by means of injection molding while inserting a part of the base frame (Column 3, lines 24-46).

Regarding Claim 29, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method further comprising the step of accommodating the base frame in a molding die, the base frame having a plurality of bosses formed on the outer circumferential surface of the base frame, the bosses each having a height capable of contacting with the inner surface of the molding die in closed condition (Figures 3 and 4); and filling up a cavity between the outer circumferential surface of the base frame and the inner surface of the molding die with molten resin to provide the reinforcing frame parts by hardening the molten

resin, whereby the base frame is covered with the reinforcing frame parts (Figures 3 and 4; Column 5, lines 50-67; Column 6, lines 1-14).

Regarding Claim 31, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, including a method wherein the bosses are shaped to be substantially columnar (Figure 3).

Regarding Claim 32, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, including a method wherein the base frame has a plurality of ribs formed on the outer circumferential surface of the base frame (Figure 3).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif.

Regarding Claims 30 and 33, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, but he does not show specific claimed arrangement of bosses. However, to be entitled to weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure (*Ex parte Pfieffer* 135 USPQ 31).

Claims 19 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Hier et al. (U.S. Patent 6,568,707).

Regarding Claim 19, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, but he does not show relative rigidity between the first material and the second material. Hier et al., hereafter "Hier," show that it is known to carry out a manufacturing method wherein the material of the reinforcing frame parts is higher in rigidity than the material of the base frame (Column 3, lines 62-67; Column 4, lines 1-4). Hier and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Hier's rigidity teachings in Millif's molding process in order to obtain an article which has the appropriate structure to be useful in a vehicular environment.

Regarding Claim 34, Millif shows that it is known to carry out a method of manufacturing a cross member, which is configured to extend in a width direction of a vehicle body and which is configured to have both ends connected to side framework structures of the vehicle body (Abstract), the method comprising the steps of resinous molding a base frame from a resinous material of a class of resinous materials, wherein the base frame is configured to extend in a width direction of a vehicle body (Column 3, lines 14-16); and insert molding limited ranges of the base frame in a resinous material of the material class of the base frame, thereby forming reinforcing frame parts integral with the base frame (Column 3, lines 31-35), wherein the base frame and the reinforcing frame parts have cross sections (Figure 3; It is noted that the method steps (i.e. molding steps) of the claim are not affected by changing the cross sections of the frame parts. To be entitled to weight in method claims, recited structural limitations must

Application/Control Number: 10/697,638

Art Unit: 1732

affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. Ex parte Pfeiffer 135 USPQ 31.). Millif does not show relative rigidity between the first material and the second material. Hier shows that it is known to carry out a manufacturing method wherein the material of the reinforcing frame parts is higher in rigidity than the material of the base frame (Column 3, lines 62-67; Column 4, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Hier's rigidity teachings in Millif's molding process in order to obtain an article which has the appropriate structure to be useful in a vehicular environment.

Claims 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Aichner et al. (U.S. Patent 6,231,940).

Regarding Claim 21, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 20 above, but he does not show reinforcing material in the base frame. Aichner et al., hereafter "Aichner," show that it is known to carry out a manufacturing method wherein the base frame is made from resinous material containing reinforcing material (Column 5, lines 6-23) Aichner and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Aichner's reinforced base frame in Millif's molding process in order to obtain an article which has the appropriate structure to be robust in a vehicular environment.

Regarding Claim 24, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 21 above, but he does not show a specific reinforcing fiber in his base frame.

Aichner shows that it is known to carry out a manufacturing method wherein the reinforcing material contains glass fiber (Column 5, line 20). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Aichner's glass-reinforced base frame in Millif's molding process in order to obtain an article which has the appropriate structure to be robust in a vehicular environment.

Regarding Claim 25, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 21 above, but he does not show a specific reinforcing composition. However, it is well established that proportions or values are critical only when they involve a difference in kind rather than degree (In re Touvay et al., 121 USPQ 265).

Claims 22, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Anderson et al. (U.S. Patent 6,468,458).

Regarding Claim 22, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 20 above, but he does not show reinforcing material in his reinforcing frame parts. Anderson et al., hereafter "Anderson," show that it is known to carry out a manufacturing method wherein the reinforcing frame parts are made from resinous material containing a reinforcing material (Column 4, lines 15-17). Anderson and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

Regarding Claim 26, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 22 above, but he does not show a specific reinforcing element. Anderson shows that it is known to carry out a manufacturing method wherein the reinforcing material contains light reflective particles (Column 4, lines 15-17: metal fiber). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's metal-reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

Regarding Claim 27, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 22 above, but he does not show a specific reinforcing composition. However, it is well established that proportions or values are critical only when they involve a difference in kind rather than degree (*In re Touvay et al.*, 121 USPQ 265).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Cooper (EP 1329302). Millif shows the process as claimed as discussed in the rejection of Claim 16 above, but he does not show forming a hollow part. Cooper shows that it is known to carry out a manufacturing method wherein the base frame has a hollow part (Abstract). Cooper and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

### Response to Arguments

Page 9

Applicant's arguments with respect to claims 16-34 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/697,638 Page 10

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maf

August 1, 2005

MICHAEL P. COLAIANNI

SUPERVISORY PATENT EXAMINER